

*Part 5*  
**Spy Equipment**, *74/72*

American intelligence agencies are perfecting bizarre surveillance devices which make James Bond's gadgets look Victorian.

Some of the equipment is already in use by government agencies engaged in snooping.

The devices depend on lasers, infrared rays and microwaves to eavesdrop; pierce the

darkness and peek through keyholes.

The ancient art of training pigeons, for example, has been combined with modern laser techniques. Keen-eyed pigeons have been trained to fly wherever they see a split-second flash of red made by a laser beam.

The beam may be subliminally flashed on the window-sills, say, of a foreign embassy or military conference room. A pigeon, with an adhesive-enclosed "bug" stuck to his chest, flies to the sill. He is trained to snatch off the adhesive-coated microphone-transmitter, which then drops to the sill.

The "bug" records all conversations in the room. When the intelligence agency wants to retrieve the "bug," it flashes another laser beam. The pigeon flies to the sill, presses his body to the adhesive packet and flies home.

Another laser device simply focuses on a window pane of a room in which people are talking. Their conversation causes minute vibrations of the pane. The pane acts as a mirror, bouncing back the laser beam with an "image" of the vibrations. These are "translated" into voices by a laser receiving set.

Still another eavesdropper floods a room with microwaves and then "reads" the changes in the microwave configuration caused by voices in the room. The Russians used a

similar technique successfully against our embassy in Moscow for years.

Lasers have also been developed to heat up a spot on an enemy tank or ship. Then, heat-homing missiles are fired which dart accurately to the heated spot.

Ingenious U.S. infrared experts have fashioned giant searchlights which illuminate whole areas for those with special viewers. The "spotlights" can be mounted on helicopters to reveal troops in pitch darkness. Or they can be set atop buildings to expose the movements of rioters in the dark.

The infrared devices, however, also "illuminate" the dangers of this new family of snoopers. Tests on infrared cameras showed that a 1/1000th flash at 20 feet burned rabbits' retinas.

A former consultant to the Defense Department, Dr. Milton Zaret has confirmed that the lasers not only bounce off the glass, but penetrate the rooms. The lasers, microwaves and infrared beams can cause cataracts and other long-range injuries to people they strike.

Thus, electronic smog created by the surveillance equipment may be ruining the eyes of spies, Communist diplomats and innocent citizens who just happen to be in or near the rooms when the hazardous rays are unleashed.